

## REMARKS

Claims 1-13 remain pending in the above-referenced application and are submitted for the Examiner's reconsideration.

The Examiner objected to the claims because of the absence of certain features believed by the Examiner to be necessary to the claims. In view of the amendments made to the claims, Applicants submit that this objection has been obviated.

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 3,898,017 to Mandroian ("Mandroian"). Claims 1, 2, and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,814,721 to Mills ("Mills"). Claims 1-4 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,071,081 to Shiraishi ("Shiraishi"). Claim 1 has been amended to recite the limitations of now-canceled claim 3, namely, that "according to a thin film technique, the heating element is applied to a substrate which is provided with a cover to form a chamber"; further, claim 1 has been amended to recite "a current measuring unit to infer an instantaneous electrical resistance of the heating element." Support for the current measuring unit limitation is found at least at page 8, lines 10-15, of the specification. Claim 11 has been amended to recite "determining an electrical resistance of the heating element by measuring an instantaneous electrical current at the heating element," and to recite "ascertaining the boiling point of the fluid with the aid of the electrical resistance of the heating element and at least one of a temperature characteristic and a resistance characteristic of the heating element." Support for this limitation is found at least at page 8, line 26, to page 9, line 1, of the specification.

Regarding claim 1, because it now recites the heating element is applied to a substrate according to a thin film technology, it is not anticipated by Mandroian or Mills. In both of these references, rather, the heating element, in the form of a resistor wire, is dipped into the fluid.

By contrast, Shiraishi teaches a micropump in which a heating element is applied to a substrate. However, counter to the opinion of the Examiner, Applicants submit that, using this device, it is not possible to measure the boiling temperature of a fluid. For, the device from Shiraishi has no technical features for undertaking a temperature measurement. Using the micropump, a simple transfer of a controlled quantity of fluid is effected. Therefore,

measuring a temperature is not provided, using this device, and accordingly technical means for determining temperature are lacking.

As for claim 11, it was made clear, that the method is carried out using a heating element on a substrate and that the determination of the boiling point of the fluid takes place with the aid of the electrical resistance of the heating element and a temperature and/or resistance characteristic of the heating element. To make it clearer, the step was added that the electrical resistance of the heating element is first derived from measurements of the instantaneous current at the heating element. Since neither Mills, nor any other reference relied on by the Examiner, teaches these features, Applicants submit that claim 11 is patentable as well.

As for the Section 103 rejection of the remaining dependent claims based on combinations of the above-referenced patents with certain other cited references, since none of these other cited references overcomes the deficiencies noted above with respect to Mandroian, Mills, or Shiraishi, these remaining dependent claims are patentable for at least the same reasons given above.

It is therefore respectfully requested that the objections and rejections be withdrawn, and that the present application issue as early as possible.

Respectfully submitted,

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